

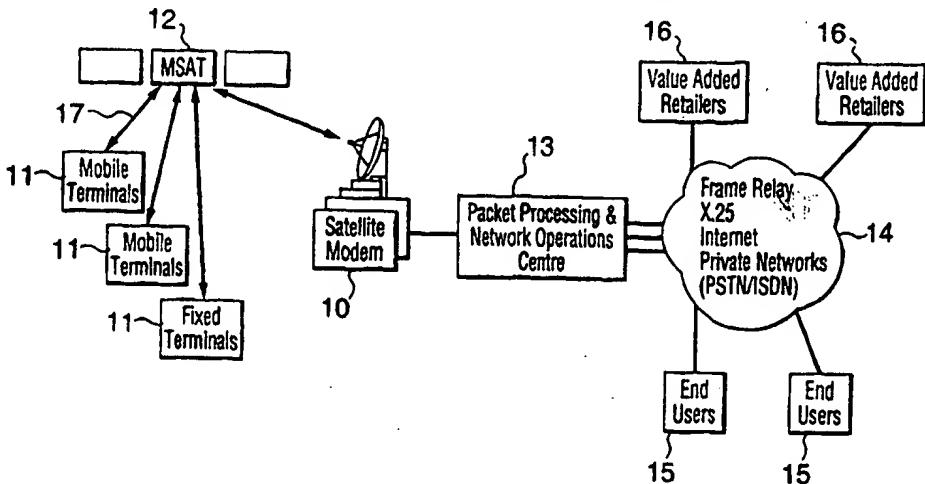


## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 :  H04B 7/212, 7/26		A1	(11) International Publication Number: <b>WO 99/49592</b>
			(43) International Publication Date: 30 September 1999 (30.09.99)
(21) International Application Number: PCT/CA99/00247		(74) Agents: MacGREGOR, George et al.; Marks & Clerk, P.O. Box 957, Station B, Ottawa, Ontario K1P 5S7 (CA).	
(22) International Filing Date: 23 March 1999 (23.03.99)		(81) Designated States: AU, BR, CA, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).	
(30) Priority Data: 60/079,134 24 March 1998 (24.03.98) US 2,237,289 11 May 1998 (11.05.98) CA		Published <i>With international search report.</i>	
(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US 60/079,134 (CON) Filed on 24 March 1998 (24.03.98)			
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(54) Title: TDMA PACKET DATA COMMUNICATION SYSTEM

Satellite Packet Data Network Architecture



## (57) Abstract

A packet data communication system includes a control station and a plurality of mobile terminals that communicate on demand with the control station over a wireless link. The control station has a data port for receiving data packets destined for the terminals, an arrangement for generating a plurality of data channels for carrying the data packets, and an arrangement for assigning the data packets destined for a particular terminal to one or more of the data channels. A control channel carries control information pertaining to the data channels. The channels are transmitted to the mobile terminals as an r.f. signal. The terminals have a receiver for receiving the r.f. signal, an analog-to-digital converter for digitizing the received signal, and a buffer for storing the digitized received signal. The terminals continually monitor the control channel to extract control information. The stored signal is processed to extract packet data destined for the terminal from one or more of the data channels in response to control information received on the control channel.

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